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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/573,526 BEAUDOIN, NORMAND Office Action Summary Examiner Art Unit MARY A. DAVIS 3748 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-40 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 24 March 2006 is/are: a) ☐ accepted or b) ☑ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 9/13/06; 1/30/07.

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Attachment(s)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

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#### DETAILED ACTION

#### Drawings

- 1. The drawings are objected to because the following Figure labels need to be added to the drawings: Figures 5a, 5b, 5c, 6a, 6b, 6c (referenced on Page 101 ¶00666-¶00668), Figure 9 (references b1 and b2 need to be added, see Page 102, ¶00672), 10a (Page 29, ¶00188), 10b (Page 29, ¶00188), 10c (Page 31, ¶00197), 11b (there are two 11a, but no 11b), Figure 12 should be labeled 12.1, as well as, labels for a1, d need to be added (see Page 104, ¶00679), 15a, 15c (note: brief description discloses 15a and 15c, but no 15b, Page 106, ¶00687 discloses 15a1, 15a2, and 15a3), 24a, 24b, 24c, 26a, 26b, 26c, 26d, 29 (not labeled but construed to be the figures above Figure 30), Figure 33.2 should include b1, b2, b3, c1, c3 (see Page 118, ¶00752-00753), 32a, 32b, 32c, 35.4c (there are two figures that are labeled 35.4b), 37.2a, 37.2b, 37.2c, and 58 (label on the drawing is missing). The lengthy disclosure has not been checked to the extent necessary to determine the presence of all possible errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the disclosure.
- Figures 1a, 1b, 1c, 2, 3a, 3b, 3c, 4a, 4b, and 4c should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
- The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)
   because they do not include the following reference sign(s) mentioned in the description: Figure 5b1 and 5b2 (Page 22, ¶00145), support gear also external 37

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(Page 101, ¶00666), hoop gear 38 (Page 101, ¶00666), systematic deconstruction 47 (Page 102, ¶00672), Figure 33.3 is described on Page 119, ¶00756 (there is no Figure 33.3 in the drawings).

- 4. The drawings are objected to because the arrows shown on Figure 25e shows that the paddle and cylinder are rotating in the same direction, however, on Page 115, ¶00733 is disclosed to be in "contrario movement", which the Examiner believes the applicant means that the paddle and cylinder are rotating in opposite directions.
- The drawings are objected to because label "3" is shown twice, it appears that one of the "3" should be labeled - -11 - -.
- The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)
   because they include the following reference character(s) not mentioned in the description: 212, 213, 214, 216, 217, 218, 219, 220, 222, 223, 224, 225, and 226.
- 7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the paddle part is realized by a plurality of the paddle parts (claims 12 and 31); the paddle structure is constituted of a group of straight segments, connected non-rigidly between themselves by their extremities in such a manner as to form a flexible paddle structure (claim 13, when using different materials, the drawing should use different hash marks for the material (see MPEP 608.02 and Pages 600-114 and 600-115); putting in layered composition many groups of compressive parts, the cylindrical part of one of them which could be used, by its exterior surface, as a paddle part of the exterior compressive group, and by its interior surface, the cylindrical part to the group of interior

compressive parts (claim 16); the exit tree of power being the tree of the eccentric supporting the paddle compressive part or the tree supporting the cylindrical compressive part (claims 23 and 37) (the figures should be labeled so that it is clear on what the applicant considers the elements to be); and an engine, compressor, collection machine, pump, propeller, turbine, mechanical part of a mechanical turbine, artificial heard, or wind mill (claims 25 and 38) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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## Specification

## 9. Content of Specification

Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

10. The disclosure is objected to because of the brief description of the drawings is missing some figure descriptions. Please add description or modify the summary of Figure description to include the following: Figures 1a. 1b. 1c. 3b. 3c. 8a. 8b. 8c. 10a. 10b, 10c (in the Figures 10c on Page 31, ¶00197, is believed to be shown in Figure 11), 11a, 11b, 11c, 11d, 11e, 13a, 13b, 13c, 19 (no description), 22a, 22b, 24a, 25a, 25b, 25c, 25d, 25e, 25f, 33.2a, 33.2b, 33.2c, 33.3 (there is no drawing 33.3 presented in the original disclosure), 34a, 35a, 35.4a, 35.4b, 35.4c, 35.5a, 35.5b, 35.5c, 35.6a, 35.6b, 35.6c, 36a, 36b, 36c, 37.1a, 37.1b, 37.1c, 37.3a, 37.3b, 38a, 38b, 38c, 39.1a, 39.1b. 39.1c, 39.21, 39.2b, 39.2c, 41.1 (there is no drawing 41.1 presented in the original disclosure), 41.2a, 41.2b, 42.1a, 42.1b, 42.1c, 42.2a, 42.2b, 42.2c, 42.3a, 42.3b, 42.3c (also review the description), 43a, 43b, 43c, 44a, 44b, 44c, 44d, 50.3a, 50.3b, 54a, 54b, 55a, 55b (55a and 55b appears to be describing two different figures, however, only one figure is shown, as well as, a and b in Figures 55 does not appear to be describing what is stated in the summary of the figures), 56.1a, 56.1b, 56.1c, 56.1d, 56.2, 59a, 59b, 59c (stated in the brief description in a, b, c what is shown in the same figure however, a, b, and c are not labeled in the Figure), 60 (no Figure with this number), and 62 (no Figure with this number). Furthermore, the drawings should be listed in numerical order, when

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a drawing number is skipped it appears that a drawing is missing, instead of being a numbering error.

Page 133, ¶00823, "paddle part 505" appears to be mislabeled, and should be - - paddle part 305 - -.

Appropriate correction is required.

- 11. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- 12. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter. For example, "In summary, thus, the current invention has for objectives" (Page 1, ¶0005), "diverse chromatic scales" (Page 2, ¶006) (chromatic is defined to be related to colors and music, what does the applicant mean by "chromatic scales"?), "contrario movement" (Page 115, ¶00733), and "rotavio" (see below for even more examples).

## Claim Objections

- 13. The following claims are objected to because of the following informalities:
  - Claim 1, line 4 "sides, being a cylindrical and paddle part" is recommended to be changed to - - sides comprising of a cylindrical part and a paddle part - -.

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 Claim 1, line 6 – "above the number" and claim 2, line 7 "superior to the number" should be - - greater than the number- -, since the limitation is directed to a comparison between a quantity and not a location.

- Claim 1. line 7 "sizes" should be - sides -.
- Claim 1, line 10 "inferior" opening is believed to be misspelled, and should be - - interior - -.
- Claim 1, line 14 "tree of exit power" is an unclear terminology. Even though the applicant can be his own lexicographer, the Examiner recommends changing "tree of exit power" to - - power crankshaft - -.
- Claims 17 and 32 is recommended to change "have a rotation in opposite direction" to - - rotate in different directions- -.
- Claim 24, line 7 "axe" appears to be misspelled and should be - axis -.
- The entire claim set should be reviewed for consistency between the
  independent and dependent claims. For example, "mechanical
  inductions" are limited in claims 1 and 2, but the dependent claims are
  directed to "inductions". -- Mechanical inductions -- should be used
  throughout the claim set.

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

14. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

15. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "rotativo" (does the applicant mean rotative?), "contrario rotativo" (Page 1, ¶0003), "brough" (Page 90, ¶00568 and ¶00569 appears to be misspelled and it is believed that the applicant meant brought), "brining" (Page 90, ¶00572), "allos" and "contrario" (Page 93, ¶00600, Is "contrario" suppose to be - - contrary- -?), "shows what we'll name the rule of cylindrical counter-part" (Page 93. ¶00601) is not clear on what the applicant is trying to describe. "It is important to make the following comments" (Page 95, ¶00614, no comments follow this statement, and it is unclear if this was intended to be apart of the summary of the figures, "retro rotation" (Page 30, ¶00192 does the applicant mean - - counter rotation or counterclockwise--?), "geometrico" (Page 35, ¶00217, should this be geometrical?), "gab" (Page 38, ¶00227 should be - - gap - -), "contratio" (Page 44, ¶00253 - does the applicant mean counterclockwise, opposite, contrary?), "exposition" (Page 99, ¶00655, does the applicant mean - - application - -?), and "tree of exit power" ("tree of exit power" is assumed to mean crankshaft). This list is not all inclusive, but is a few examples of the unclear and inexact terms used in the specification. The applicant should review the disclosure and correct any errors due to the translation.

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16. Claims 1-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

16a. Claim 1 recites the limitation to "this machine characterizing itself by the rotation of the cylindrical part around the paddle structure, thus describing a rotary movement. whereas each of the points of the paddle structure realize, for a complete machine cycle, a circular figure, the centers of these circular figures being equidistant between themselves, and located in periphery and at an equal distance of the center of the cylindrical cavity, the paddle structure realizing a circular displacement all while conserving a same orientation for all of its course, thus effecting a movement of rotary translation". Claim 2 recites the limitation to "whereas for each of the points of the paddle structure realized, for a complete cycle of the machine, a geometric figure defined by an N number of successive lobes in which the center of this geometric figure coincides with the center of the cylindrical cavity, and which N is superior to two". The paddle is shown in some figures to correlate with the geometric figure; however, in other parts of the specification and figures, the paddle does not correlate with the geometric figure. The specification is not clear on how the applicant generates the geometric figure, and specifically what the correlation is between the geometric figure and the paddle part or the cylindrical part. Figure 17 discloses the movement of the paddle. If a line is drawn between the tip of the successively moving paddle (labeled 1-10 in the

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drawing), a kidney shaped geometric figure could be traced, however, later drawings do not show a kidney shaped geometric figure. Figure 35.4 b (both Figures 35.4b's) appears to show a geometric figure defined by dashes, however, the trace of the dashes are not always in contact with the paddle. Further examples between the paddle not contacting the geometric figure include Figures 35.6, 36, 39.2, 40, and 41.2 to name a few. Figure 35.5 shows the paddle to correlate with the geometric figure (square). The "geometric figures" for a three sided paddle are shown in Figures 39.1. 40, 41.2, 42.2, 42.3, 43-46, 47.1, and 48.1. For example, in Figure 42.2 the specification discloses that it is suppose to show the geometric figure, however, it is not clear how the applicant generated the geometric figure. In the specification Page 127, ¶00789, the disclosure states "the machine follows sequence I:1, III:2, V:3 II:P4, IV:5". These labels are not in the drawing, so what is the applicant referring to? In Figures 39.1, 40, 41.2, 42.2, 42.3, 43-46, 47.1, and 48.1 the paddle is three sided and the cylindrical part has two lobes, yet the disclosure discuss generating multiple different "geometric figures". The different gearing mechanisms appear to be the only difference between the apparatus generating different geometric figures. Is the gearing mechanisms considered to be describing the limitations to some of "the mechanical inductions"? The disclosure should be clear on which configuration of, paddle, cylindrical part, and gearing mechanism/mechanical inductions produces the different geometric figures. Furthermore, the specification often uses the terminology of "virtual" (see the summary of Figures), Figure 62, see Page 66, ¶00359, and see Page 71, ¶00390 as some examples of the use "virtual". Machine patents are based on structural

components, and not "virtual" components. Furthermore, the disclosure does not show or disclose how fluid enters and exits the apparatus. Figure 54 shows what appears to be inlets and outlets, however, it is unclear how the apparatus works. If the arrows on Figure 54 are correct, then fluid is able to enter and exit the apparatus at the same time. Furthermore, with four sets of inlets and outlets, how does the apparatus work? Why are there multiple inlets and outlets? Where are the spark plugs? In a compressor, are there still the same number of inlets and outlets? The Figure is not described in detail, as well as, the apparatus and movement of fluid within the apparatus is not clearly disclosed in the specification. In addition, using claim limitations directed to design resultants ("whereas each of the points of the paddle structure realize, for a complete machine cycle, a circular figure, the centers of these circular figures being equidistant between themselves, and located in periphery and at an equal distance of the center of the cylindrical cavity, the paddle structure realizing a circular displacement all while conserving a same orientation for all of its course, thus effecting a movement of rotary translation" (claim 1) and "whereas for each of the points of the paddle structure realized, for a complete cycle of the machine, a geometric figure defined by an N number of successive lobes in which the center of this geometric figure coincides with the center of the cylindrical cavity, and which N is superior to two" (claim 2)), as opposed to the structural features that generate the design resultants such as the gearing structure. It is unclear to determine when an apparatus is infringing, because it requires experimentation. An "apparatus claims cover what a device is, not what a

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device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (See MPEP 2114).

16b. Claims 1-3, 6-13, 15, 18, 20-21, 26, 28-32, 35, and 39 recite the limitation to "realized", "realizer", "realizing", and "realization". A few examples are: "realized" is found in (Claim 1, lines 6 and 12; claim 2, line 6 and 20), "realize" is found in (Claim 1, lines 18), "realizing" is found in (claim 1, lines 4 and 22; claim 2, line 5), and "realization" is found in (claim 3, line 2). This list is not all inclusive, since this terminology is utilized throughout the entire claim set. The Dictionary definition for "realize" as "to grasp or understand clearly". What does the applicant mean to limit by using the words "realized", "realize", "realizing", and "realization"? Structural limitations should use positive limitations that disclose a structural element and not a thought process. The claim limitations to "realized", "realize", "realizing", and "realization" is unclear on exactly what the applicant means by these limitations, and it appears that the context the applicant is using these limitations contradicts the Dictionary definition.

16c. Claim 3 recites the limitation to "in which a part of the mechanical induction allows the realization of a positioning of the paddle part is defined in function with the compressive parts, and in which the mechanical induction part allows the control of the orientation of the paddle part is defined in function with the geometric figure". The claim language is so unclear, the Examiner does not understand what the applicant is trying to limit. What does the applicant mean by "allows the realization of a positioning of the paddle part is defined in function with the compressive parts"? What is the function, is it a mathematical equation, a profile, or is the applicant trying to state that the positioning

of the paddle part is dependent on the location of the cylindrical part? Since the paddle part makes up the compressive parts (see claim 2, lines 4-5 limitation), and in claim 3 "allows the realization of a positioning of the paddle part is defined in function with the compressive parts", then how can the paddle part be defined by the paddle part? What does the applicant mean by "the mechanical induction part allows the control of the orientation of the paddle part is defined in function with the geometric figure"? Is the mechanical induction part defined by the geometric figure or is the paddle part defined by the geometric figure?

- 16d. Claim 4 recite the limitation to "retro rotation speed" (Claim 4, line 2). What does the applicant mean by "retro rotation speed"?
- 16e. Claim 6 recites the limitation to "the geometric figure has N lobes described by the paddle part is produced by successively realizing the sides of this figure". Is the paddle part or the geometric figure produced by "successively realizing the sides of this figure"? What is "this figure" referring to? What does the applicant mean by "produced by successively realizing the sides of this figure"? How is it produced? What is mean by "successively realizing the sides"?
- 16f. Claim 7 recites the limitation to "which the order of compressions of a cycle is produced by displacing the paddle part according to the geometric figure by realizing its lobes non successively, the totality of the lobes of this figure being realized by more than a rotation of the paddle part". What does the applicant mean by "the geometric figure by realizing its lobes non successively, the totality of the lobes of this figure being realized by more than a rotation of the paddle part"? Figures 40, 41.2, and 42.2 and the

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specification are believed by the Examiner to be what the applicant is trying to limit. It is not clear on how the applicant generates the "geometric figure". Is the "geometric figure" generated by the paddle or the cylindrical part? If the geometric figure is generated by the paddle, as shown in the overlay in Figure 4, what is the correlation between the geometric figure and the paddle? In Figure 40 the overlay of the paddle does not show any correlation of the paddles tips with the geometric figure generated. 16g. Claims 8 and 9 recites the limitation to "the dynamic of the compressive parts is realized inversely, the cylindrical part realizing the movement of rotational translation and the paddle part realizing the rotational movement". What does the applicant mean by "the dynamic of the compressive parts is realized inversely"? If the applicant means for the limitation "the cylindrical part realizing the movement of rotational translation and the paddle part realizing the rotational movement" that the paddle rotates and the cylindrical part translates (i.e. doesn't rotate about it's center), this contradicts the independent claims 1 and 2 limitation of "the rotation of the cylindrical part around the paddle structure" (claim 1, lines 15-16, claim 2, lines 17-19). A dependent claim can not remove or change the claim limitations which the claim depends from.

16h. Claims 10-11 and 29-30 recite the limitation to "thus realizing the machine in its post rotary form" (claims 10 and 29) and "thus realizing the machine in its retro rotary form" (claims 11 and 30). What does the applicant mean by "realizing" in this claim? What is the applicant trying to structural limit by this limitation? Furthermore, using the terminology "post rotary form" or "retro rotary form" adds no structural limitation.

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16i. Claims 12 and 31 recite the limitation to "the paddle part is realized by a plurality of the paddle parts, each of these parts possessing its own mechanical induction, and each of these parts acting in complicity and synchronization with the cylindrical part". An apparatus comprising of a plurality of paddle parts is not shown or disclosed in the specification. How does an apparatus with plural paddle parts work? What mechanical inductions are used, as well as, what geometric figures are generated? Where are the inlet and outlets to the multiple paddle system? Does one paddle part outlet feed the inlet to the other paddle part?

- 16j. Claim 13 recites the limitation to "the paddle structure is constituted of a group of straight segments, connected non-rigidly between themselves by their extremities in such a manner as to form a flexible paddle structure, called paddle structure, this structure being realized dynamically inside the cylindrical part". A flexible paddle structure is not shown. What does the applicant mean by "this structure being realized dynamically inside the cylindrical part"?
- 16k. Claim 14 recites the limitation to "in which the movement of the paddle points of the paddle structure is rectilinear alternative". "Rectilinear" is defined in the dictionary to mean forming, formed by, or moving in a straight line. The paddle structure that moves in a straight line would be a piston (35), shown in Figure 5. Claim 1 limits the apparatus to a "cylindrical and paddle part" (line 4) where "the paddle being set up in the inferior opening of the cylindrical part" (lines 10-11), and "the rotation of the cylindrical part around the paddle structure" (line 16). Figure 5 does not show or disclose the rotation of the cylindrical part around the paddle structure. How does the apparatus work in

order to produce "rectilinear" movement? What does the applicant mean by the terminology of "rectilinear alternative"?

when the support of one of the compressive parts is activated with a mechanical group comprising a supplementary induction realized in combination with the original induction, making the rotary movement of a compressive part pass to a planetary movement, or even making the simple planetary movement of a compressive part to a composed planetary movement". Is the "mechanical group" the same as "mechanical inductions" in claims 1 and 2 (which claims 15 and 32 depend from)? What does the supplementary induction look like? What is at least one configuration of paddle part, cylindrical part, and mechanical inductions disclosed by the applicant that meets this limitation? Claims 15 and 32 also specifically state that "the rotary movement of a compressive part pass to a planetary movement". A dependent claim can not change the claim limitations of the independent claim. Since claims 1 and 2 disclose the apparatus to have "rotary movement" (claim 1, lines 16-17, claim 2, line 19), the modification of the elements in claim 15 and 32 is not proper.

16m. Claims 16 recites the limitation to "putting in layered composition many groups of compressive parts, the cylindrical part of one of them which could be used, by its exterior surface, as a paddle part of the exterior compressive group, and by its interior surface, the cylindrical part to the group of interior compressive parts". Multiple groups of compressive parts are not shown in a single apparatus. How does an apparatus with multiple groups work? What paddle parts, cylindrical parts, and mechanical induction

are used? Where are the inlet and outlets to the multiple paddle system? Does one group outlet feed the inlet to another group?

16n. Claim 18 recites the limitation to "the movement of one of its compressive parts is irregular, alternatively realizing accelerations and decelerations which could add, when the compressive part possesses a planetary movement, an oscillatory character to it, these accelero-decelerative movements which could be realized with the support of polycammed gears". What is meant by "alternatively realizing accelerations and decelerations which could add"? What is added? How can a part "posses a planetary movement" while also having "an oscillatory character to it"? What is an "accelero-decelerative movement"? What "supports" the polycammed gears?

16o. Claims 22 and 36 recite the limitation to "the inductions of the compressive parts

16o. Claims 22 and 36 recite the limitation to "the inductions of the compressive parts share a common element, this element being: an eccentric, a dynamic support gear of a planetary induction, or a paddle". In the independent claim the compressive parts comprise of the cylindrical part and the paddle part. The entire claim set includes limitations to the "mechanical inductions". What are the mechanical inductions? Are the "mechanical inductions" the gearing or can it be something else? What is meant by "share a common element" in this claim limitation? What is the mechanical induction sharing the common element with? Please point out where the inductions share a common element with the eccentric, the dynamic support gear of a planetary induction, and the paddle.

16p. Claims 23 and 37 recite the limitation to "the exit tree of power is ... the tree supporting the cylindrical compressive part". The disclosure does not show how this

limitation is met? The "exit tree of power" has been construed by the Examiner to be the crankshaft.

16q. Claim 24 recites the limitation to "the induction of the paddle part is said descending, this induction characterizing itself by the rigid set up on the paddle part of a peripheral support, this gear activating indirectly or directly an induction gear, this induction gear being set up rigidly in the center of the cylindrical part of the machine, or on an axe of the cylindrical part". What does the applicant mean that the induction of the paddle part is descending? Is the gear descending? What is "this induction characterizing itself by the rigid set up on the paddle part of a peripheral support" referring to? What structural features are being limited? Is the mechanical induction located in or on the paddle part? What is the peripheral support? Please point out in one of the Figures, what the applicant considers the peripheral support to be in this claim limitation. If "the induction" is considered to be "this gear", which due to it being both the "induction" and a "gear" can also be called an "induction gear", how does "this gear" distinguish itself from the "induction gear" in the claim. Using first or second induction gear is recommended, since the claim language appears to be contradicting itself.

16r. Claims 25 and 37 recite the limitation to a "machine according to claim 1, used as: engine, compressor, collection machine, pump, propeller, turbine, mechanical part of a mechanical turbine, artificial heard, or wind mill". The applicant has not disclosed how the machine functions in these capacities. No inlets, outlets, fuel input, and spark plugs are defined in the specification or in the figures. What is an "artificial heard"?

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How can this machine be used as an engine, compressor, collection machine, pump, propeller, turbine, mechanical part of a mechanical turbine, artificial heard, or wind mill?

16s. Claim 26 and 39 recite the limitation to "we confer the paddle part to an aerodynamic curve allowing to realize the transport of substances in the machine: from the periphery towards the center from the center towards the periphery or from a lateral face to another". What does the applicant mean by "we confer the paddle part to an aerodynamic curve"? The dictionary definition for "confer" is "to consult together; compare opinions". Are you comparing the paddle part to another part, and if so, to what part? How are substances transported in the machine from the periphery towards the center, from the center towards the periphery, or from a lateral face to another?

What is the applicant referring to by "another"? The applicant does not disclose how substances are transported within the machine. There is no inlet and outlets disclosed by the applicants. How does the machine work?

rotary part, or the paddle part". What rotary part is the applicant referring to? Does the applicant mean the cylindrical part for "the rotary part"? There are no valves or spark plugs shown in the Figures. Where are the vales and spark plugs? How does the machine operate when there are valves and spark plugs in the machine?

16u. Claims 28 and 40 recites the limitation to "the emplacements of the valves, spark plugs and other accessories are set up in function of the material figures and the realization sequence of the compressions". Where is the emplacement of the valves and spark plugs? What "other accessories" is the applicant referring to? What is the

Claims 27 recite the limitation to "the valves, spark plugs are installed on the

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applicant trying to limit by the limitation to "are set up in function of the material figures and the realization sequence of the compressions" which is unclear and does not make sense. What is a "material figure"? How can something be "set up in function"? What is "the realization sequence of the compressions"?

- 16v. Claims 3-40 are rejected by virtue of their dependence on claims 1 and 2.
- 17. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 18. Claims 1-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 18a. Claim 1, lines 4-5 recites the limitation to "these parts realizing compression chamber in complicity". What parts is the applicant referring to? What does the applicant intend to limit by "realizing compression chamber in complicity"? The Examiner is construing this limitation to mean and recommends the limitation is changed to - the cylindrical part and the paddle part form compression chambers between themselves -.
- 18b. Claim 1, lines 5-6 "the number of compressions realized per cycle" is being construed by the Examiner to mean - the number of compressions performed per cycle -.
- 18c. Claims 1 and 2 recite the limitation to "an interior opening chosen in function with the form of the paddle" (claim 1, lines 9-10; claim 2, lines 11-12). What does the applicant mean by "chosen in function with the form of the paddle"? Is the interior

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opening the same shape as the paddle? The limitation to "an interior opening chosen in function with the form of the paddle" is so vague that it is unclear on exactly what the applicant is trying to limit by this claim limitation.

- 18d. Claim 4 recites the limitation "the eccentric's rotation" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 18e. Claim 5 recites the limitation "the retro rotation speed" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- 18f. Claims 10 and 29 recite the limitation to "its". What is "its" referring to?
- 18g. Claims 15 and 31 recite the limitation "the original induction" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.
- 18h. Claims 17 and 33 recite the limitation to "the compressive parts have a rotation in opposite direction, when they're observed from the exterior". The Examiner is unclear on why the applicant includes the limitation to "when they're observed from the exterior". What does the applicant intend to limit by this limitation? "The compressive parts" should be changed to - the paddle part and the cylindrical part -.
- 18i. Claims 19 and 33 recite the limitation to "the support gear of the mechanical induction of one of its compressive parts is dynamic". "The support gear" in line 2 has insufficient antecedent basis for this limitation in the claim. Stating that a component of the mechanical induction is "dynamic" does not further limit the claim; since the mechanical induction was already limit the apparatus to the sychronization of the mechanical inductions, which inherently means that they are "dynamic". If the applicant

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is using "dynamic" to limit the apparatus to a specific structure, the applicant should describe the structure that enables the apparatus to be "dynamic".

- 18j. Claim 24 recites the limitation "this gear" in line 4. There is insufficient antecedent basis for this limitation in the claim.
- 18k. Claim 27 recites the limitation "the valves" and "the rotary part" in line 2. There is insufficient antecedent basis for these limitations in the claim.
- 18l. Claims 28 and 40 recite the limitation "the material figure" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 18m. Claims 28 and 40 recite the limitation "the realization sequence" in line 4. There is insufficient antecedent basis for this limitation in the claim.

### Claim Rejections - 35 USC § 103

- 19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. Claims 1-10, 15-16, 18-26, 29, 32, and 34-39 are rejected under 35

  U.S.C. 103(a) as obvious over any of the following: BEAUDOIN '118 (World Intellectual Property Organization WO 02/075118 A1, also see US 2004/0129244, which is part of the patent family), BRODOV ET AL (Russian Patent No. 2,140,018

  C1), SCHWAM (U.S. Patent 6,761,144 B2), and WANKEL ET AL (U.S. Patent 2,988,065), as currently understood by the Examiner.

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21. Claims 11 and 30 are rejected under 35 U.S.C. 103(a) as obvious over any of the following: BEAUDOIN '118, BRODOV ET AL, and WANKEL ET AL, as currently understood by the Examiner.

- Claims 17 and 33 are rejected under 35 U.S.C. 103(a) as obvious over SCHWAM, as currently understood by the Examiner.
- Claims 27-28 and 40 are rejected under 35 U.S.C. 103(a) as obvious over either one of SCHWAM and WANKEL ET AL, as currently understood by the Examiner.

Regarding claim 1, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

• An energetic rotary machine, having an exterior housing (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VIII(b), VIII(b), IX(b), IX(b), XI(b), I(c), -VIII(c), IX(c), XI(c), XII(c), XIV(c), XVI(c), XVI(c), XVII(c), I(d)-VIII(d), I(e), III(e)-VII(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), V(f), VIII(f), XIII(f)-XX(f) of BEAUDOIN '118 that shows an exterior housing; Page 11, first full paragraph of BRODOV ET AL; (24) of SCHWAM; (26) of WANKEL ET AL) in which are dynamically set up two complementary compressive parts each having a specific number of sides, being a cylindrical ((19,1, 41, 3, 9-11, 22, 61, 16, and 26) of BEAUDOIN '118; (5, 31, 28) of BRODOV ET AL; see Figures 4 and 6 of SCHWAM, where in Figure 6 the cylindrical part is rotating about the triangular paddle; (6, 38) of WANKEL ET AL) and paddle ((18, 13, 29, 25, 54, 7, 36, 37, 38, 55, 116, 5, 12a, 14a, 15a, 17, 26, and 21) of BEAUDOIN '118; (1, 30, 27) of BRODOV ET AL; (38) of

SCHWAM; (2, 39) of WANKEL ET AL) part, these parts realizing compression chambers in complicity (see Figures I(a), VI(a),X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), IX(b), IX(b), II(c), -VIII(c), IX(c), XI(c), XII(c), XIV(c), XVV(c), XVII(c), XVIII(c), II(d)-VIII(d), II(e), III(e)-VI(e), IX(e), XIIII(e)-XIX(e), IV(f), V(f), VII(f), XIIII(f)-XX(f) of BEAUDOIN '118; see Figures 1, 2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM; see Figures 2-14, 18-38, 42-49, and 56-58 of WANKEL ET AL),

• the number of compressions realized per cycle being equal or above/superior/greater than the number of sides of the paddle/paddle structure (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VIII(b), VIII(b), IX(b), IX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XII(c), XIV(c), XV(c), XVI(c), XVII(c), IVII(d), II(e)-VII(e), IX(e), XIII(e)-XIX(e), IV(f), VII(f), XIII(f)-XX(f) of BEAUDOIN '118; see Figures 1, 2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM; see Figures 2-14, 18-38, 42-49, and 56-58 of WANKEL ET AL. The Figures show that the paddle divides the chamber by the number of tips that engage the cylindrical part. The compression chambers are formed between adjacent tips of the paddle part and the cylindrical part. These Figures show that there is always the number of compression chambers equal to or greater than the paddle structure, and therefore, it is inherent that the number of compressions realized per cycle is also equal to or greater than the number of sides of the paddle).

- the cylindrical part having an annular form with an circular exterior profile (see Figures I(a), VI(a),X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), iX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XIV(c), XV(c), XVI(c), XVII(c), XVII(c), III(e)-VII(d), II(e), III(e)-VI(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), V(f), VIII(f), XIII(f)-XX(f) of BEAUDOIN '118 that show a circular exterior profile; see Figures 1, 2, 4, 6, 8, and 10 of BRODOV ET AL; see Figure 6 of SCHWAM; see Figures 2-14, 18-38, 42-49, and 56-58 of WANKEL ET AL) and an interior opening chosen in function with the form of the paddle (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VIII(b), VIII(b), IX(b), IX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XIV(c), XV(c), XVI(c), XVII(c), XVII(c), XIII(f)-XX(f) of BEAUDOIN '118; see Figures 1, 2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM; see Figures 2-14, 18-38, 42-49, and 56-58 of WANKEL ET AL. It is inherent that the interior opening is chosen to function with the paddle, in order for the machines to work.),
- the paddle being set up in the interior opening of the cylindrical part (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), IX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XIV(c), XVV(c), XVI(c), XVII(c), I(d)-VII(d), I(e), III(e)-VI(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), VII(f), XIII(f)-XX(f) of BEAUDOIN '118; see Figures 1, 2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM; see Figures 2-14, 18-38, 42-49, and 56-58 of WANKEL ET AL),
- these complementary compressive parts being realized/connected between themselves (see Figures I(a), VI(a), XI(a), XI(a), I(b)-V(b), VIII(b), VIII(b), IX(b),

- iX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XII(c), XIV(c), XV(c), XVI(c), XVII(c), XVII(c)
- one of the compressive parts being connected directly or indirectly to a tree of exit power ((12, 34, 2, 15, 19, 105, 40, 1, 28, 37, 41, 53, 54, 55, 70, 111, 6, 7, 63, 73, 700, 110, 115, 500, 4, 5, 102) see Figures II(a)-XI(a), I(b)-IV(b), VI(b), VIII(b), III(c), X(c)-XV(c), XVI(c), XVII(c), VI(e), IX(e)-XV(e), XVIII(e)-XIX(e), II(f), III(f), and XI(f) of BEAUDOIN '118; (7) and see Figures 3, 5, 7, and 9 of BRODOV ET AL; (12) and see Figures 4-6 of SCHWAM; (3) and see Figures 1, 17, 39 of WANKEL ET AL. It is inherent that the compressive parts are connected either directly or indirectly to a tree of exit power, in order for the crankshaft to transfer the mechanical energy to or from the crankshaft to the compressive parts.),
- this machine characterizing itself by the rotation of the cylindrical part around the paddle structure (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), IX(b), IX(b), I(c), -VII(c), IX(c), XI(c), XII(c), XIV(c), XV(c), XVI(c), XVII(c),

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I(d)-VII(d), I(e), III(e)-VI(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), V(f), VII(f), XIII(f)-XXX(f) of BEAUDOIN '118; see Figures 4 and 5 of BRODOV ET AL and see Page 7 and ABSTRACT; see Figure 6 of SCHWAM; see Figures 3-14, 19-38, and 42-49 of WANKEL ET AL), thus describing a rotary movement.

Regarding claim 2, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose the following limitations discussed above in claim 1 where paddle structure is the same as "paddle".

Regarding claim 6, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

• in which the geometric figure has N lobes described by the paddle part is produced by successively realizing the sides of this figure (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), IX(b), XI(b), I(c), -VII(c), IX(c), XI(c), XII(c), XIV(c), XV(c), XVI(c), XVII(c), I(d)-VII(d), I(e), III(e)-VI(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), VII(f), XIII(f)-XX(f) of BEAUDOIN '118; see Figures 1-2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM; see Figures 2-14, 18-38, and 42-49 of WANKEL ET AL).

Regarding claims 10 and 29, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

the number of sides of the paddle structure is superior by one to that of the cylindrical part, thus realizing the machine in its post rotary form (see Figures I(a), V(b), II(c), VI(c), VII(c), XI(c), XII(c), XIV(c), I(d)-III(d), V(d)-VI(d), I(e), III(e), VI(e), IX(e)-X(e), and XIII(e)-XIX(e) of BEAUDOIN '118; see Figures 2, 4,

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8, and 10 of BRODOV ET AL; see Figure 6 of SCHWAM; see Figures 2-14 of WANKEL ET AL) .

Regarding claims 11 and 30, BEAUDOIN '118, BRODOV ET AL, and WANKEL ET AL disclose:

the number of sides of the paddle structure is inferior by one to that of the
cylindrical part, thus realizing the machine under its retro rotary form (see
Figures I(a), VI(a), X(a), XI(a), I(b)-IV(b), VII(b)-IX(b), I(c)-V(c), VI(c), XV(c),
XVII(c), I(d)-III(d), and IV(d)-VII(d) of BEAUDOIN '118; see Figure 2 and 6 of
BRODOV ET AL; see Figures 18-38 and 42-49 of WANKEL ET AL).

Regarding claims 17 and 33, SCHWAM discloses:

 the compressive parts have a rotation in opposite direction, when they're observed from the exterior (see Figure 6).

Regarding claims 23 and 37, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

• the exit tree of power is either: the tree of the eccentric supporting the paddle compressive part or the tree supporting the cylindrical compressive part ((12, 34, 2, 15, 19, 105, 40, 1, 28, 37, 41, 53, 54, 55, 70, 111, 6, 7, 63, 73, 700, 110, 115, 500, 4, 5, 102) see Figures II(a)-XI(a), I(b)-IV(b), VI(b), VIII(b), III(c), X(c)-XV(c), XVI(c), XVII(c), VI(e), IX(e)-XV(e), XVIII(e)-XIX(e), I(f), III(f), and XI(f) of BEAUDOIN '118; (7) and see Figures 3, 5, 7, and 9 of BRODOV ET AL; (12) and see Figures 4-6 of SCHWAM; (3) and see Figures 1, 17, 39 of WANKEL ET AL).

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Regarding claims 25 and 38, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

engine, compressor, collection machine, pump, propeller, turbine, mechanical
part of a mechanical turbine, artificial heard, or wind mill (see ABSTRACT of
BEAUDOIN '118; see Pages 1-2 of BRODOV ET AL; see ABSTRACT of
SCHWAM; Column 1, lines 11-18 of WANKEL ET AL).

Regarding claims 26 and 39, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose:

• the paddle part to an aerodynamic curve allowing to realize the transport of substances in the machine: from the periphery towards the center from the center towards the periphery or from a lateral face to another (see Figures I(a), VI(a), X(a), XI(a), I(b)-V(b), VII(b), VIII(b), IX(b), IX(b), IX(b), I(c), -VIII(c), IX(c), XI(c), XII(c), XIV(c), XV(c), XVI(c), XVII(c), III(d)-VII(d), I(e), III(e)-VI(e), IX(e), X(e), XIII(e)-XIX(e), IV(f), V(f), VIII(f), XIII(f)-XX(f) of BEAUDOIN '118; see Figures 1-2, 4, 6, 8, and 10 of BRODOV ET AL; see Figures 4 and 6 of SCHWAM: see Figures 2-14, 18-38, and 42-49 of WANKEL ET AL).

Regarding claim 27, SCHWAM and WANKEL ET AL disclose:

the valves, spark plugs are installed on the rotary part, or the paddle part (see
Figures 4 and 6 that show spark plug (84) is installed on the cylindrical rotary
part of SCHWAM; see Figure 2, showing the spark plug (32) is installed on the
rotary part of WANKEL ET AL).

Regarding claims 28 and 40, SCHWAM and WANKEL ET AL disclose:

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 the emplacements of the valves, spark plugs and other accessories are set up in function of the material figures and the realization sequence of the compressions (it is inherent that the valves, spark plugs, and other accessories are set up in order for the engine to function properly).

However, BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL fail to specifically disclose the geometric figure, including a circular figure, which is generated due to the movement of the paddle part. The claim limitation directed to "whereas each of the points of the paddle structure realize, for a complete machine cycle, a circular figure, the centers of these circular figures being equidistant between themselves, and located in periphery and at an equal distance of the center of the cylindrical cavity, the paddle structure realizing a circular displacement all while conserving a same orientation for all of its course, thus effecting a movement of rotary translation" (claim 1) and "whereas for each of the points of the paddle structure realized, for a complete cycle of the machine, a geometric figure defined by an N number of successive lobes in which the center of this geometric figure coincides with the center of the cylindrical cavity, and which N is superior to two" (claim 2) are considered design resultants. Apparatus claims should describe the physical structure of the system. The use of the functional language only requires that the apparatus is capable of performing the function, and does not add any specific structural limitations to the apparatus. Even though the references may not specifically disclose geometrical figures, including a circular figure, which can be traced from the path traveled by the paddle, the machines disclosed by the references inherently produce geometric figures, and therefore, the

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prior art meets the functional limitation. Furthermore, "apparatus claims cover what a device *is*, not what a device *does." Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). (See MPEP 2114))

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have the paddle part generate a geometric figure, including a circular figure or N lobes greater than two in the machines of BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL, since it requires only routine skill in the art to provide a desired gearing structure (mechanical inductions) to be used for a particular purpose or to solve a stated problem. Furthermore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have the paddle part generate a geometric figure, including a circular figure or N lobes greater than two and having the paddle and cylindrical part rotating in either direction with respect to each other and at the same or different speeds by changing the gearing structure in the machines of BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL, since it requires only routine skill in the art to make a simple substitution of one gearing system for another to produce predictable results including rotational directions and speed of rotation.

24. Claims 12 and 31 are rejected under 35 U.S.C. 103(a) as obvious over any of the following: BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL, as currently understood by the Examiner.

BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose the claimed invention, as discussed above, however fails to disclose the paddle part is

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realized by a plurality of the paddle parts, each of these parts possessing its own mechanical induction, and each of these parts acting in complicity and synchronization with the cylindrical part.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a plurality of paddle parts in the apparatus of BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

25. Claims 13-14 are rejected under 35 U.S.C. 103(a) as obvious over any of the following: BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL in view of HURLEY (U.S. Patent 3,081,745), as currently understood by the Examiner.

BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL disclose the claimed invention, as discussed above, however fails to disclose the paddle structure consisting of a group of straight segments, connected non-rigidly between themselves by their extremities in such a manner as to form a flexible paddle structure. HURLEY discloses the paddle being formed with non-rigid segments (54) (see Figures 1 and 6, which discloses the seal surrounding the paddle, which interfaces with the cylindrical part).

It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have non-rigid connections between the straight segments

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of the paddles in the apparatus of any one of BEAUDOIN '118, BRODOV ET AL, SCHWAM, and WANKEL ET AL, in order to seal between adjacent chambers.

#### Communication

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY A. DAVIS whose telephone number is (571)272-9965. The examiner can normally be reached on Monday thru Thursday; 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 3748 Examiner, Art Unit 3748